United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

				<u> </u>
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,000	07/24/2003	Ben T. Mozo	P68804US01JB	9925
23378 7590 01/04/2007 BRADLEY ARANT ROSE & WHITE, LLP INTELLECTUAL PROPERTY DEPARTMENT-NWJ			EXAMINER	
			PENDLETON, BRIAN T	
1819 FIFTH AVENUE NORTH BIRMINGHAM, AL 35203-2104 ART UNIT PAPER N				PAPER NUMBER
			2615	
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MON	THS	01/04/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)			
		10/626,000	MOZO, BEN T.			
	Office Action Summary	Examiner	Art Unit			
		Brian T. Pendleton	2615			
Period fo	The MAILING DATE of this communication or Reply	n appears on the cover sheet w	ith the correspondence address	S		
WHIC - Exte after - If NC - Failt Any	ORTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING INTERPRETATION OF THE MAILING INTERPRETATION OF SIX (6) MONTHS from the mailing date of this communication of period for reply is specified above, the maximum statutory pure to reply within the set or extended period for reply will, by reply received by the Office later than three months after the ed patent term adjustment. See 37 CFR 1.704(b).	IG DATE OF THIS COMMUNI FR 1.136(a). In no event, however, may a son. beriod will apply and will expire SIX (6) MON statute, cause the application to become Af	CATION. reply be timely filed VTHS from the mailing date of this commun BANDONED (35 U.S.C. § 133).			
Status						
1) 又	Responsive to communication(s) filed on	24 July 2003				
2a)☐	:	This action is non-final.				
3)	· <u> </u>					
,	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims	•	·			
	Claim(s) 1-18 is/are pending in the application	ation				
-,-	4a) Of the above claim(s) is/are with					
5)⊠	Claim(s) 11-18 is/are allowed.	Tarawi Herri derioladi alleri.				
	Claim(s) <u>1-10</u> is/are rejected.					
7)	Claim(s) is/are objected to.					
	Claim(s) are subject to restriction a	nd/or election requirement.				
	ion Papers					
	•					
	The drawing(a) filed an 24 total 2003 is to					
10)[The drawing(s) filed on <u>24 July 2003</u> is/are		-			
	Applicant may not request that any objection to					
111	Replacement drawing sheet(s) including the co					
'''	The oath or declaration is objected to by the	ie Examiner. Note the attached	J Oπice Action or form P1O-15	52.		
Priority ι	ınder 35 U.S.C. § 119					
	Acknowledgment is made of a claim for for ☐ All b) ☐ Some * c) ☐ None of:	reign priority under 35 U.S.C. §	119(a)-(d) or (f).			
7	1. Certified copies of the priority docur	ments have been received.				
	2. Certified copies of the priority docur		opplication No			
	3. Copies of the certified copies of the		· -	۵		
	application from the International Bu		Todali od ili dilo Madoliai Olagi	•		
* 5	See the attached detailed Office action for a	` ` ''	received.			
		,				
A441						
Attachmen		 (
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-946		Summary (PTO-413) s)/Mail Date			
3) 🛛 Inforr	mation Disclosure Statement(s) (PTO/SB/08)	5) Notice of Ir	nformal Patent Application			
Pape	r No(s)/Mail Date	6)	<u></u> .			

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Rhines, US Patent 4,479,239. Rhines discloses a sound detecting device comprising headset 26 having earcups 28 and 29 for attenuating ambient sound waves, microphone 20 for transducing ambient sound waves into electronic signals, potentiometer 27 for increasing the electrical signals at a fixed rate of gain, IC-2 and Q-2 for deactivating and reactivating the sound output in the event of saturation of the amplifier IC-1 (see column 4 lines 11-27), speaker 32 for transducing the electronic signals into sound waves, and amplifier IC-1 for supplying the sound waves suitable for the auditory system to the external auditory canal. Claim 6 is rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhines.

Rhines does not disclose that the sound is deactivated in 10 microseconds or less, is reactivated in 30 microseconds or less, is deactivated when the ambient sound waves exceed 139 dB peak, or

Art Unit: 2615

is reactivated when the sound waves no longer exceed 139 dB peak. One of ordinary skill in the art would have realized those values for a sound detecting device utilized to suppress loud sounds without undue experimentation. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the circuitry to meet the values claimed for the purpose of quickly suppressing loud sounds over 139 dB and quickly restoring the ambient sounds under 139 dB.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhines in view of Morrill et al, US Patent 6,175,633. Rhines discloses a method of communication comprising headset 26 having earcups 28 and 29 for attenuating ambient sound waves, microphone 20 for transducing ambient sound waves into electronic signals, potentiometer 27 for increasing the electrical signals at a fixed rate of gain, IC-2 and Q-2 for deactivating and reactivating the sound output in the event of saturation of the amplifier IC-1 (see column 4 lines 11-27), speaker 32 for transducing the electronic signals into sound waves, and amplifier IC-1 for supplying the sound waves suitable for the auditory system to the external auditory canal. Rhines does not disclose providing output to and input from a radio communications system. Morrill et al teach a radio communications apparatus with attenuating ear pieces comprising ear pieces 22L and 22R, transducers 24L and 24R, and radio transceiver 16. Thus, Morrill et al. teach providing output to and input from a radio communications system for an apparatus for attenuating ambient sound waves. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Rhines by coupling a communication system, as taught by Morrill et al, for the purpose of providing external communication, such as to other persons observing distant sounds. Claim 1 is rejected. Regarding claims 2-5, one of ordinary skill in the

Art Unit: 2615

art would have realized those values for a sound detecting device utilized to suppress loud sounds without undue experimentation. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the circuitry to meet the values claimed for the purpose of quickly suppressing loud sounds over 139 dB and quickly restoring the ambient sounds under 139 dB.

Allowable Subject Matter

Claims 11-18 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not disclose nor suggest a fixed gain pre-amplifier, rheostat, and
fixed gain output amplifier in the electronic circuitry, as recited in independent claims 11, 13, 15,
and 17. As a result, the claims and their dependents are allowed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Brimhall, US Patent 6,801,629; Svean et al, US Patent 7,039,195; Chang et al, US Patent 5,631,965; Bourk, US Patent 5,182,774; Trompler, US Patent 4,928,311; Williams, US Patent 4,064,362; and Kyle et al, US Patent 3,952,158.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (571) 272-7527. The examiner can normally be reached on M-F 7-4:30.

Art Unit: 2615

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian T. Pendleton Primary Examiner Art Unit 2615

322

btp